### Curriculum

**General Education Core – Total of 15 Hours**

**Area I – Language Arts/Communications – Choose 3 Hours**

- ENGL 1101 Composition & Rhetoric (3)

**Area II – Social/Behavioral Sciences – Choose 3 Hours**

- ECON 1101 Principles of Economics (3)
- ECON 2105 Macroeconomics (3)
- ECON 2106 Microeconomics (3)
- HIST 1111 World History I (3)
- HIST 1112 World History II (3)
- HIST 2111 U.S. History I (3)
- HIST 2112 U.S. History II (3)
- POLS 1101 American Government (3)
- POLS 2401 Global Issues (3)
- PSYC 1101 Introductory Psychology (3)
- SOCI 1101 Introduction to Sociology (3)

**Area III – Natural Sciences/Mathematics – Choose 3 Hours**

- MATH 1101 Mathematical Modeling (3)
- MATH 1103 Quantitative Skills/Reasoning (3)
- MATH 1111 College Algebra (3)

**Area IV – Humanities/Fine Arts – Choose 3 Hours**

- ENGL 1102 Literature & Comp. (3)
- ENGL 2110 World Literature (3)
- ENGL 2130 American Literature (3)
- HIST 1111 World History I (3)
- HIST 1112 World History II (3)
- HIST 2111 US History I (3)
- HIST 2112 US History II (3)
- HUMN 1101 Intro to Humanities (3)
- MATH 1101 Math Modeling (3)

**General Education Core Electives**

- ARTS 1101 Art Appreciation (3)
- BIOL 1111(L) Biology I + Lab (4)
- BIOL 2113(L) Human A&P I + Lab (4)
- BIOL 2114(L) Human A&P II + Lab (4)
- ECON 1101 Principles of Economics (3)
- MATH 1103 Quant. Skills/Reason (3)
- MATH 1111 College Algebra (3)
- MATH 1112 College Trig (3)
- MATH 1113 Precalculus (3)
- MATH 1127 Intro to Statistics (3)
- MATH 1131 Calculus I (4)
- MUSC 1101 Music Apprec. (3)
- PHYS 1110(L) Conc. Phys + Lab (4)
- POLS 1101 American Govt. (3)
- PSYC 1101 Intro Psychology (3)
- PSYC 2103 Human Develop. (3)
- RELG 1101 World Religions (3)
- SPAN 1101 Intro to Spanish (3)

**Program-Specific Core – Total of 39 Hours**

- ELTR 1010 Direct Current Fundamentals (3) - OR -
- IDFC 1011 Direct Current I (3) - OR -
- IDSY 1101 DC Circuit Analysis (3)

- ELTR 1020 Alternating Current Fundamentals (3) - OR -
- IDFC 1012 Alternating Current I (3) - OR -
- IDSY 1105 AC Circuit Analysis (3)

- IDFC 1013 Solid State Devices I (3)
- IDSY 1110 Industrial Motor Controls (4)
- IDSY 1120 Basic Industrial PLCs (4)
- IDSY 1190 Fluid Power Systems (4)
- IDSY 1210 Industrial Motor Controls II (4)
- IDSY 1220 Intermediate Industrial PLCs (4)
- IDSY 1230 Industrial Instrumentation (4)
- MCTX 2250 Mechatronics Capstone (3)
- AUMF 1150 Introduction to Robotics (3)

**Occupational-Related Electives**

- AIRC 1005 Refrigeration Fundamentals (4)
- AUMF 2060 Work Cell Design Laboratory (2)
- BUAS 1010 BAS Fundamentals (2)
- IDSY 1130 Industrial Wiring (4)
- IDSY 1170 Industrial Mechanics (4)
- IDSY 1240 Maintenance for Reliability (4)
- WELD 1000 Intro to Welding Technology (4)
- WELD 1010 Oxyfuel Cutting (4)

For more information about our graduation rates, the median debt of students who complete programs, and other important information please visit our website: [http://www.laniertech.edu/GE.aspx](http://www.laniertech.edu/GE.aspx).
Mechatronics Technology
Degree Program
MT23

Program Description
The Mechatronics Technology degree program is designed for the student who wishes to prepare for a career as a Mechatronics Technician/Electrician. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skills. The program teaches skills in Mechatronics Technology providing background skills in several areas of industrial maintenance, including electronics, industrial wiring, motors, controls, PLC’s, instrumentation, fluid power, mechanical, pumps and piping, and computers. Graduates receive a Mechatronics Technology Degree that qualifies them for employment as Industrial Electricians or Mechatronics Technicians.

Program Specific Information
Students are accepted every semester based on course and space availability.

Program Length & Availability
4 Semesters
Campus Availability: Barrow

Admissions Requirements
• Must be 16 years of age.
• High school diploma or GED is required prior to admission.
(Official transcripts or GED scores must be submitted from all colleges and/or high schools attended for credit.)
• ACCUPLACER Testing, or submit SAT, ACT, CPE, or COMPASS test scores.

Financial Aid
This program is eligible for the Pell Grant and may be eligible for Institutional and State Financial Aid. Contact a Financial Aid Counselor for eligibility requirements and application materials.

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